

- (b) contacting said nucleic acid array with said sample under stringent hybridization conditions;
 - (c) washing said nucleic acid array;
 - (d)(e) detecting a hybridization signal from said hybridization feature and background signal from said background feature;
 - (e)(d) subtracting said background signal from said hybridization signal to obtain a background corrected hybridization signal; and
 - (f)(e) relating said background corrected hybridization signal to the presence of said analyte target nucleic acid in said sample to detect the presence of said analyte target nucleic acid in said sample;
- wherein said method is further characterized by including a target nucleic acid labeling step prior to said detecting step (d).

14. (Cancelled)

15. (Original) The method according to Claim 14, wherein said labeling step comprises labeling any analyte target nucleic acids present in said sample with a member of a signal producing system prior to said contacting step (b).

16. (Original) The method according to Claim 14, wherein said labeling step comprises labeling any analyte target nucleic acids present on said array following step(b) with a member of a single producing system.

17. (Original) The method according to Claim 13, wherein said background feature is a polymeric composition that comprises background probes that do not specifically bind under stringent hybridization conditions to any target nucleic acids of said sample.

18. (Original) The method according to Claim 17, wherein said background feature provides a background signal following said contacting step that comprises: (a) a feature substrate background component; (b) a probe background component; and (c) a non-specific binding background component.

19. (Original) The method according to Claim 18, wherein said background probes of

said background feature range in length from about 5 to about 100 nt.

20. (Original) The method according to Claim 18, wherein said background probes are selected from the group consisting of empirically observed inactive probes, probes forming intramolecular structures, short probes, probes comprising reverse polarity nucleotide analogs, probes comprising abasic phosphodiester or probes comprising modified nucleotidic units.

21. (Previously presented) The method according to Claim 13, wherein said background feature provides a signal that is the same as a signal generated by a validated background feature made up of empirically observed inactive probes.

22. (Original) The method according to Claim 21, wherein said validated background feature is made up of nucleic acids having a nucleic acid sequence selected from the group consisting of SEQ ID NOS: 1 to 53

23. (Original) The method according to Claim 13, wherein said background feature tests positive in a two-color self-self array hybridization assay.

Claims 24-27 (Cancelled)